FINANCIAL OPERATIONS OF OHIO FARMER OWNED ELEVATORS DURING THE FISCAL YEAR 1930-31.

by

B. A. Wallace

Department of Rural Economics
Ohio State University

and

Ohio Agricultural Experiment Station

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Foreword

The farmers of Ohio own some 270 elevators or exchanges thru which they sell grain and buy farm supplies. In September, 1929, the Department of Rural Economics issued a bulletin # telling of the status and business operations of these companies, based on figures from 119 companies, operating 138 plants. A year later another bulletin # told the story of 1929-30 in figures from 144 companies operating 168 plants. The following pages constitute our third bulletin, and present the financial record for the year 1930-31.

The tables given are based on the following:

1. The principal balance sheet and income and expense items for 151 companies operating 180 plants.

2. Detailed analysis of expense items from 50 companies.

3. Commodity sales and margins from 27 companies.

4. Accounts receivable data month by month from 17 companies from January, 1925 to December, 1930.

The system of grouping followed last year is continued in the present bulletin, and divides the companies operating one plant each into four groups (I to IV), as follows:

Group I	-	All below $75,000 in volume of sales.
" II	-	With volumes of $75,000 to $150,000.
" III	-	With volumes of $150,000 to $225,000.
" IV	-	Companies with volumes of sales above $225,000.
" V	-	All companies operating two or more plants each.

Mimeographed Bulletins #21 for 1928-9, and #28 for 1929-30.

Chapter I.

"The year 1929-30 has presented some difficult problems to the handlers of grain and farm supplies. The drastic drop in wheat prices in the fall of 1929 caught many elevators with considerable wheat on hand; for the elevator whose small volume required several days in which to assemble a car, the price decline was a constant threat. The general decline in commodity price level thru the year meant also that much of the farm supplies handled were sold on a lower general market than that on which they were bought." Thus began the bulletin of a year ago. Now we know that the price decline did not end with January or June, 1930.

A glance at a few figures will be interesting in this connection. On grains we use the Ohio farm price as given by the Department of Agriculture; on feeds we use a weighted average dairy feed and poultry feed price as developed in the Farm Management work of this department. Many elevators use the calendar year as their fiscal year and will be interested in the December to December decline as given below. Others end their fiscal year in early summer and for them we have shown the decline in the average of April, May and June prices from 1930 to 1931. The figures appear in Table I below:

Table I

Price decline 1930-31, expressed in percent.

Period	Wheat	Corn	Oats	Poultry Feed	Dairy Feed
Dec. 1929 to Dec. 1930	35%	12%	22%	23%	12%
April, May, June, 1930 to April, May, June, 1931	29%	19%	28%	26%	22%

Obviously different elevators had varying proportions of the different commodities, bought with different degrees of skill and luck, and had varying rates of turnover, so were affected differently. But in any case the declining price level must have had several effects

1. Reduced by 15% to 25% the volume of sales as expressed in dollars (unless there was material increase in tonnage to counterbalance.)

2. Reduced the inventory value. An elevator carrying a tonnage representing $10,000 at the beginning of the year would find the same tonnage representing possibly $8000 to $8500 at the end of the year.

3. Reduced the margin of profit. Many a dealer on receiving and unloading a car of goods knew that prices had already declined $1.00 to $3.00 per ton since he contracted for the goods.

4. Forced a rise in percent of expense compared to dollars of sales. With little decline in tonnage, expense could not be greatly decreased and if dollars of sales declined e.g., 10% and expense remains constant, the percent of expense to dollars of sales must increase about one ninth.

One major factor in any sales problem is volume of business, so we begin our study of the figures of the 151 companies with Table II, presenting the picture of volumes in the different groups. Remembering the basis of the grouping as presented in the Foreword, we have

Table II.

Sales of Ohio Farmer's Elevators for 1930-1, compared with preceding years.

	1930-1			1929-30	1928-9
Group	Number Companies	Total Sales	Av. per Company	Av. per Company #	Av. per Company #
I	32	$1,679,848	$ 52495	$ 55292	$ 56207
II	56	6,038,461	107830	112270	113037
III	35	6,309,677	180276	185811	183563
IV	11	3,076,877	279716	301570	274611
V	17	4,971,137	292419	337234	294911
Total	151	22,076,000	146199	170226	147382

\# The average for 1929-30 is of 144 companies, and for 1928-29 is of 119 companies.

The decline from $170,000 to $146,199 in volume is approximately 14%, which would seem to indicate that on the whole tonnage declined little if at all. In spite of price decline thirteen companies increased their dollar volumes over the preceding year.

To discover with what success the elevators of the various groups met the problems of such a period, one may go to Table III which presents group by group the record as shown in gains and losses.

Table III.

Gains and Losses of 151 Companies for the Year 1930-31

Group	No. of Companies	Companies Showing Gains		Companies Showing Losses		Net Gain of Group	Av. Gain per Co.
		No.	Amount	No.	Amount		
I	32	21	$ 20968	11	$ 13875	$ 7093	$ 222
II	56	41	107330	15	26045	81285	1451
III	35	28	110956	7	15890	95066	2716
IV	11	11	36839	0	-----	36839.	3349
V	17	8	63010	9	27871	35139	2067
Total	151	109	339103	42	83681	255422	1692

An examination of this table brings out the following:

1. Of the 151 companies 72% showed net profits, 28% showed losses.

2. The 109 companies showing gains averaged $3111 per company and the 42 showing losses had an average loss of $1992.

3. On a plant basis the average gain for the 180 plants represented was $1419 per plant.

4. Whereas in the two preceding years the smaller volume companies, i.e., those below $150,000 showed an excessive proportion of losses, in 1930-31 these two groups present very little more than their proportionate share of those suffering losses.

In making the study each year it has been our practice in order to give the most fair and most complete picture to present the data from all companies whose figures we were able to secure. For purposes of comparing one year with another, the data from identical companies is the better basis and in Table IV we present the gains, group by group, of the 112 companies whose data we have for the past three years placing each company in the group in which it was in 1928-9.

Table IV.

Net Gains of Identical Companies by Groups, 1928-9 to 1930-31.

Group	No. Companies	1928-9	1929-30	1930-31
I	23	$ 15,459	$ 8,357	$ 1,846
II	35	107,492	85,930	67,919
III	29	137,944	138,621	64,112
IV	13	79,925	59,038	36,936
V	12	90,039	89,281	12,576
Totals	112	430,859	381,227	183,389

In this comparison we note that the companies in Group II fared the best, showing only 37% decline in net gains in the past two years; the companies in Groups I and IV were the most severely punished. The net gains of 1930-1 for the 112 companies are 43% of the net gains of the same companies two years before - a decline of 57%. A comparison with private business is interesting at this point. The National City Bank Magazine for September, 1931, presents total net gains for 555 companies representing the New York Stock Exchange and representing a net worth of nearly 20 billions of dollars. The net income of these 555 companies showed for the first half of 1931 a decline of 67% from the net gains for the corresponding period of 1929. While these figures are not directly comparable, they do indicate that the difficulties confronting farmers' elevators are a part of a general situation which has hit private business fully as severely.

Another approach from which to view a company's income is that of earnings per $100 share. The 151 companies had outstanding $4,085,383 in capital stock. The net gain of $255,422., divided among 40854 shares, gives a net gain of $6.25 per $100 share. Two years before 119 companies showed net gains of $14.40 per share; in 1929-30, 144 companies gained $11.40 per share; in 1930-31, 151 companies gained $6.25 per share. In two years our final averages show a decline of 56½%. The 555 corporations mentioned above showed in 1930 a decline in net returns of over 70% from the 1928 figure. (Again, the 70% and the 56½% are not exactly comparable, and are presented together merely to show that the problem confronting the elevators is not a problem of elevators alone, of farm marketing alone, or of cooperation alone)

Thus far we have been investigating the net incomes of the past fiscal year. To get at the condition of the elevator companies as they closed their fiscal years, we go to the balance sheets. What do we find?

Before we examine the figures available, certain facts should be in mind:

1. Probably 60% of the companies close their books as of December 31; another 25% close their books as of some date from April 30 to June 30, with the remainder of the companies using scattering dates mostly in the first four months of the year, and a very few between June 30 and December 31. Hence, the figures we present are not as of any one date.

2. Boards of Directors up to recently generally followed the practice of declaring the dividend after the audit was completed; hence, "surplus" contained the whole net gain of the year. Recently an increasing number of boards are declaring dividends as soon as net earnings are known, and setting up a reserve or liability to the amount of the dividend, so that the dividend for the year has been deducted before surplus is shown. Often our data is not complete on this point, which would mean that later years are at some disadvantage in comparison with our figures for 1928-9.

At the close of 1930-31 we have the figures of Table V.

Table V.

Surplus or Deficit of Ohio Elevators at end of fiscal year, 1930-31.

Group	No. in Group	No. with Surplus	Amount of Surplus	No. with Deficit	Amount of Deficit	Net Surplus	Av. per Co.	Val. of Stock per $100 Share
I	32	21	$144849	11	$47869	$96980	$3031	$116.11
II	56	47	550187	9	82294	467983	8355	133.90
III	35	31	540155	4	57409	482746	16650	145.67
IV	11	11	213746	0	-----	213746	19431	167.47
V	17	12	302503	5	64045	238458	14027	132.22
Total:	151	122	1751440	29	251617	1499913	9933	136.71

An examination of this table discloses that -

1. Of the 151 companies over 80% have surpluses, averaging $14350 per company; over 19% have deficits averaging $8675 each.

2. The average surplus per company for the 151 companies is nearly $10,000.

3. That the companies operating a single plant with a volume in excess of $150,000 have only four deficits in 46 companies.

From the original data and the bulletins of the two preceding years one secures the following additional facts:

1. The surpluses per company were as follows:

$9983 for 151 companies, 1930-31; $10027 per company for 144 companies, 1929-30; $10014 per company for 119 companies, 1928-29.

2. The average value per $100 share of nearly 40854 shares outstanding at the end of 1930-31 was $136.71 in comparison with $138. per share in 1928-9 and 1929-30. That is, the gains of the profit making companies in 1930-31 did not quite cover the total dividends paid plus income tax and other adjustments, losses of the companies suffering losses plus the increasing number of dividends set up in advance of closing the books.

Chapter II.

The Income of Ohio Farmers' Elevator Companies.

The first chapter presented the outstanding facts as to the past year's net income of the group under consideration. Net income is the gross income less the losses and deductions for expense. This chapter will present some analysis of the sources of gross income.

Table VI presents the general picture.

Table VI.

Sources of Income of 151 Ohio Farmers' Elevator Companies.

Group	Sales	Trad. Marg.	Grinding	Other Income	Total Income	What % of Total Inc. is from Trad. Marg.
I	$1,679,848	$179,093	$ 42,679	$11045	$232817	76.9%
II	6,038,461	546,149	121,174	28258	695581	78.5%
III	6,309,677	509,540	86,008	27528	623076	81.8%
IV	3,076,877	190,865	32,930	13670	237465	80.3%
V	4,971,137	371,164	59,599	25016	455779	81.4%
Totals	22,076,000	1,796,811	342,390	105517	2244718	80.4%

This table shows that about four out of every five dollars of gross income comes from the margin on grain and supplies handled. As one would expect, grinding and other service items constitute a larger part of total income in case of smaller volume companies than in case of the larger - a fact which means still more when one discovers in a later table that the smaller volume companies operate on a wider trading margin than the larger.

A comparison with a similar table in the bulletin # of the preceding year brings out the increasing share service is playing, for the service functions brought in 18% of income that year as contrasted with 20% this past year. At first thought, one might assume that the larger percentage the service items play is due to the lessened dollar income from margins on goods handled. This is partly true, but grinding and other income even when measured in dollars increased 9% from the preceding years totals.

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The percentage of sales which trading margin constitutes is always of interest to the patron. This is shown in Table VII below for the year 1930-1 and with it the corresponding percentages of the two preceding years.

Table VII.

Percentage of Trading Margin Secured.

Group	1930-1931 Sales	1930-1931 Trading Margin	1930-1931 Percent Trad. Marg. is of sales	1929-30 Percent Trad. Marg. is of sales	1928-29 Percent Trad. Marg. is of sales
I	$1,679,848	$179093	10.6	9.4	9.5
II	6,038,461	546149	9.0	8.5	9.7
III	6,309,677	509540	8.1	7.7	9.1
IV	3,076,877	190865	6.2	6.4	7.2
V	4,971,137	371164	7.5	7.8	8.2
	22,076,000	1796811	8.2	7.7	8.7

In examining Table VII one finds -

1. The decline which is customary and to be expected in the trading margin taken as one passes to the larger volume groups.

2. In each of the three years the companies operating several plants fall between Groups III and IV in margin secured.

3. The percent of margin on the total volume of sales for 1930-31 falls exactly at the average for the preceding two years. One fact of great significance does not appear in the table - in fact, exact data on it is out of the question. Recognizing that prices have declined as shown in Table I, one must realize that 8.2¢ per dollar of sales means less margin per bushel of grain or hundredweight of commodities handled than did the 7.7¢ on a dollar of sales in the preceding year.

It is recognized that trading margins differ widely among the commodities; the size of the unit handled, the amount of service required, local sales versus shipment to market, the rate of turnover, are among the factors involved in these varying margins.

In the thought that on account of the price decline and especially the irregularity with which it hit different commodities, margins on different commodities for this past year would be neither typical nor very enlightening, we made no special effort to assemble commodity analyses. We find, among the reports which we have received, these data from 27 companies handling $4,817,000 of sales - about 22% of the total volume represented in our study. The margins as shown in these figures are wheat, 1.7%; corn 7.0%; oats, 6.5%; feed, 12.1%; flour, 13.4%; sundry grains, 8.3%; coal, 19.3%; fertilizer, 13.7%; seed, 11.8%; hay and straw, 6.9%; fence & posts, 14.5%; farm machinery, 14.1%; livestock 1.6%; general merchandise, 10.9% with a general average for the $4,817,000 handled by these companies of 7.9% of sales.

The final question about the amount of income of an enterprise is, How much of the income is left after expenses are paid and reserves set up. This question is answered for each group in Table VIII.

Table VIII.

Gross Income and Expense of 151 elevator Companies, 1930-31.

Group	Number of Companies	Volume of Business	Gross Income	Total Expense	Net Gain	Net gain per Co.
I	32	$1,679,848	$232817	$225725	$ 7092	$ 222
II	56	6,038,461	695581	614296	81285	1485
III	35	6,309,677	623076	528010	95066	2716
IV	11	3,076,877	237465	200626	36839	3349
V	17	4,971,137	455779	420640	35139	2067
Totals	151	22,076,000	2244718	1989297	255421	1672

The 151 companies operated 180 plants; the volume per plant averaged $122644. and the net gain $1419.

Chapter III.

Deductions from Gross Profit for Expense

During 1930-31, of each nine dollars of gross income eight were needed to pay expenses. A smaller share of gross earnings was left for net profit this year than in either of the two preceding years; This is due in part to the general rule that expenses can not be proportionately reduced as volume declines, and in larger measure to the fact that practically as large tonnage of grain and supplies had to be handled as in the preceding year, hence dollars of expense would be little reduced, while dollars of income were lessened by the declining price level.

A general picture of income and expense group by group is seen in the closing table of the preceding chapter. Table IX below presents the analysis on a company basis rather than a group basis, showing the average per company outlay for operating expense and interest, and the reserve set up for depreciation and receivables.

Table IX.

Average Expense per company for 151 Ohio Farmer Elevator Companies, 1930-31.

Group	Av. Sales per Company	Expense per Company				
		Interest	Deprec-iation	Bad Debts	Operating Expense	Total Expense
I	$ 52495	$ 551	$ 718	$276	$ 5509	$ 7054
II	107830	519	1140	336	8974	10969
III	180276	448	1748	542	12348	15085
IV	279716	783	1851	491	15114	18239
V	292419	1124	2461	535	20624	24744

These expenses expressed in percent of sales for each group are as follows:

Table X.

Major Expense Items expressed in percentage of sales
151 Ohio Elevator Companies, 1930-1.

Group	Interest	Deprec-iation	Bad Debts	Operating Expense	Total Expense
I	1.0	1.4	.5	10.5	13.4
II	.5	1.0	.3	8.3	10.1
III	.3	1.0	.3	6.9	8.4
IV	.3	.7	.2	5.4	6.5
V	.4	.8	.2	7.0	8.4
	.4	.9	.3	7.4	9.0

A comparison of this table with the corresponding table in last year's bulletin # shows every item of the final average a higher percentage of sales than it was in 1929-30, due as in other tables to the lower dollar sales arising from practically the same tonnage.

One of the perennial puzzles in regard to expense is the wide range of expense in different companies. It is obvious that a company handling only grain, if it does no hauling for its farmers, will have a very low expense per dollar of sales in comparison with a company which handles merchandise, runs a grinder and mixer, collects grain and livestock from its patrons and delivers supplies to them. Yet to find some companies with three times the expense of others near them in volume of sales seems unwarranted. Granted that peculiar circumstances might justify it in a particular case, the thing to note is that the high expense is not merely in an occasional company, but in dozens of companies.

It is recognized that bad debt reserve and interest costs are dependent more on earlier history of the company than on present operations, and that some companies charge off more liberal depreciation than others, so in the table below we do not include these items; we present only operating expense. Also to get away from the danger of the occasional extreme we present in each group the average of the three, four or five highest against that of the three, four or five lowest. The result of this computation appears in Table XI.

Table X, page 8, Mim. Bull. #28.

Table XI.

Ranges of Operating Expense as shown by comparing an average of several of the lowest with that of several of the highest, expressed in % of sales.

Group	Number in Group	Average Oper. Exp.	Comparison	Range in percent of sales
I	32	10.5%	3 low with 3 high	6.7% to 14.4%
II	56	8.3%	5 low with 5 high	4.1% to 13.4%
III	35	6.8%	4 low with 4 high	3.6% to 10.8%
IV	11	5.4%	2 low with 2 high	4.4% to 11.2%

The first assumption regarding these extremes might be that there are always occasional companies badly out of line for one reason or another, and Table XI merely brings this out. But not so, e.g., take the largest group, Group II, and go back to the original working sheets. One finds the following distribution of companies as to operating expense in cents per dollar of sales.

Range	No. of Companies	Range	No. of Companies
3¢ to 4¢	1	9¢ to 10¢	6
4¢ to 5¢	4	10¢ to 11¢	4
5¢ to 6¢	8	11¢ to 12¢	5
6¢ to 7¢	8	12¢ to 13¢	1
7¢ to 8¢	5	13¢ to 14¢	2
8¢ to 9¢	10	Above 14¢	2

That is, the distribution is fairly even from 4¢ to 12¢; omitting all extremes there are 9 companies operating at 10¢ to 12¢ per dollar of sales while 12 companies operate at 4¢ to 6¢ per dollar of sales.

In presenting these facts there is no thought that a high expense is necessarily any criticism of the management. On the other hand, one of the reasons for the existence of a cooperative is the reduction of middlemen costs; there is no question that a large proportion of cooperatives are doing it; there is equal certainty that some are not. High costs of operation in themselves do not warrant criticism but they do raise a question; they put management under the necessity of justifying them; they call for searching analysis to discover why they are as they are.

Another angle from which to approach expense is that of the distribution of the expense dollar. In Table XII we have used the expense analyses of fifty of the companies in our study. The table presents totals of the charges to each item in the fifty companies, and the number of cents each item used of the average dollar of expense.

Table XII.

Expense Charges to Various Items by 50 Ohio Elevators, 1930-31.

Item	Amount	Share of Expense Dollar
Labor	$296956	49.4¢
Power & Light	56401	9.4
Insurance	30061	5.0
Taxes	28456	4.7
Repairs & Supplies	24538	4.1
Truck Expense	16185	2.7
Post. Tel. & Tel.	7605	1.3
Advertising	7433	1.2
Audit & Legal	2487	.4
Interest	33065	5.5
Depreciation	60456	10.1
Bad Debts	13061	2.2
Miscellaneous	24165	4.0

The outstanding changes as compared with last year seem to be a rise in the share of expense going to Power, a decline in the share going to taxes (obviously due to less income on which to pay income taxes), lower allowances to bad debts and depreciation, as would be expected in a difficult year, and a rise in interest's share, for which latter the writer cannot satisfactorily account. It must not be assumed that many audits leave so much as 4% of the expense in "Miscellaneous Items." We have simply selected out the principal items appearing in nearly every audit, and placed under miscellaneous everything else including annual meeting expense, occasional rentals paid, stolen funds, travel, as well as what the auditor called miscellaneous or sundry.

Chapter IV

The Accounts Receivable Record for 1930-31.

The accounts receivable problem may be no more serious to those who sell to farmers than to those who sell to city people; coal dealers frequently say their greatest worry is over accounts with villagers. Whatever might be the results of a studied comparison on this question, the fact remains that to the elevator or feed exchange, whether owned by private firm or by some group of farmers like the cooperative elevator or the Farm Bureau, the accounts receivable constitute one of its major problems, and in many cases the most serious one.

Earlier bulletins have pointed out the growth of accounts receivable of 74 companies by 50% in the years 1924 to 1928-9. In the next year 137 companies showed an increase of 10½% over the preceding year.

The low prices which farmers have been receiving for grain, milk, eggs, and other products have interfered materially with the reduction of accounts. Many managers have said it was impossible to make collections - at least sufficiently to cut down the total outstanding.

The record of 133 companies taken together shows for the year 1930-31 an increase of 3% over the total for the preceding year as compared with a growth of 10½% the preceding year. Of the 133 companies, 59 or 44% succeeded in reducing their accounts outstanding, several of them by 30 to 50%. Illustrations are reductions from $12,200 to $8300; from $16,600 to $8200; from $8480 to $6000; from $33,300 to $24,500; from $19,700 to $13,300. On the other hand, eight of the 133 companies suffered an increase in excess of $5000.

Seventeen companies on which we have more complete data reduced their average accounts receivable by $350 per company below that of a year ago, but it is still $1600 above the average of two years ago. Expressed in percentages, the record of the 17 is as follows, each percent given being a comparison with the figures of the year before. At the end of 1926, an increase of 12%; 1927, 21% increase; 1928, 19% increase; 1929, 2% increase; 1930, a decrease of 3%. The record of the past two years would seem to show that the problem is being gotten in hand. A study of the detailed figures shows that of the 17 companies 8 offer a record of decline during the past year, and 9 of increases, the changes are nearly all small, except that one company shows an increase of 68%, and one a decrease of 44%.

Another angle from which to view accounts is that of turnover. These 17 companies had on the average a turnover of total accounts each 89 days during 1928, each 87 days in 1929, and each 99 days in 1930. The reduction in rate of turnover together with total accounts practically at a standstill, indicates that managers are more careful in allowing charges to be made rather than that collections are on the whole improving. For the 17 companies in fact, collections for 1930 were 7% below those of 1929.